

Art Unit: 2663

CPTO
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Please cancel Claims 1-36 without prejudice.

Please add the following newly-drafted Claims 37-47.

37. (New) A program receiver for displaying a graphical interactive picture by receiving a program transmitted from a program transmitter, said program receiver comprising:

signal receipt means for receiving a signal transmitted from said program transmitter, said signal being a multiplex signal including a program and data specifying a structure of the graphical interactive picture;

signal separation means for separating the signal received by said signal receipt means into a program signal and a graphical-interactive-picture-structure specification data signal;

first graphical interactive picture generation means for generating the graphical interactive picture based on the graphical-interactive-picture-structure specification data signal from said signal separation means; and

display means for displaying the graphical interactive picture generated by said first graphical interactive picture generation means.

38. (New) The program receiver of Claim 37 further comprising:

storage means for storing a plurality of basic picture elements in advance, said plurality

storage means for storing a plurality of basic picture elements in advance, said plurality of basic picture elements being figures composing the graphical interactive picture manipulated by a user and said basic picture elements being identified by identifiers; and

first graphical interactive picture generating means for generating the graphical interactive picture by combining the basic picture elements stored in said storage means.

39. (New) The program receiver of Claim 38 further comprising:

interactive manipulation means for inputting manipulation to the graphical interactive picture displayed by said display means;

basic action storage means for storing a content of an action for updating the graphical-interactive-picture-structure specification data; and

second graphical interactive picture generation means for retrieving the content of the action from said basic action storage means based on action information directing an update of the graphical interactive picture upon receipt of the input manipulation from said interactive manipulation means to update the graphical-interactive-picture-structure specification data to generate an updated graphical interactive picture.

40. (New) The program receiver of Claim 39, wherein said first graphical interactive picture generation means includes:

a receipt decode unit for receiving the graphical interactive-picture-structure specification data signal from said signal separation means to decode the same:

a storage unit for storing decoded graphical interactive-picture-structure specification data from said receipt decode unit, the graphical interactive-picture-structure specification data being composed of a panel object definition including a plurality of pieces of panel object information, an action definition including a plurality of pieces of action information, and a shape definition including a plurality of pieces of shape information;

a first process unit for retrieving the graphical interactive-picture-structure specification data from said storage unit, extracting the basic picture elements corresponding to the identifier by referring to the shape information from said storage unit in accordance with the retrieved graphical-interactive-picture-structure specification data, and for placing the extracted basic picture elements by referring to the panel object information; and

a first display control unit for controlling the display means to display the basic picture elements placed by said first process unit as the graphical interactive picture.

41. (New) The program receiver of Claim 40 wherein said interactive manipulation means includes:

an input manipulation acceptance unit for accepting a user's input manipulation to the graphical interactive picture; and

an interactive signal transmission unit for transmitting the input manipulation accepted by said manipulation acceptance unit to said second graphical interactive picture generation unit as an interactive signal, and

wherein said second graphical interactive picture generation means includes:

an interactive signal receipt unit for receiving the interactive signal from said interactive signal transmission unit;

an interactive signal interpretation unit for interpreting the interactive signal receipt unit;

a graphical-interactive-picture-structure specification data update unit for retrieving a content of an action from said basic action storage means in accordance with the interactive signal interpreted by said interactive signal interpretation unit to update the graphical-interactive-picture-structure specification data in said storage unit;

a second process unit for retrieving updated graphical-interactive-picture structure specification data from said storage unit and for extracting the basic picture elements corresponding to the identifier from said storage means to place the extracted display elements; and

a second display control unit for controlling said display means to display the basic picture elements placed by said second process unit as an updated graphical interactive picture.

42. (New) The program receiver of Claim 41 further comprising information transmission means for transmitting the data of the graphical interactive picture updated by said interactive manipulation means to said program transmitter.

43. (New) The program receiver of Claim 40 further comprising information transmission means for transmitting the data of the graphical interactive picture updated by said interactive manipulation means to said program transmitter.

44. (New) The program receiver of Claim 40 further comprising information record means for outputting data related to the graphical interactive picture as per manipulation form said interactive manipulation means to make a record thereof.

45. (New) The program receiver of Claim 39 further comprising information record means for outputting data related to the graphical interactive picture as per manipulation form said interactive manipulation means to make a record thereof.

46. (New) The program receiver of Claim 40, wherein said graphical-interactive-picture-structure specification data further includes a class definition including a plurality of pieces of class attribute information.

47. (New) The program receiver of Claim 37 further comprising:

interactive manipulation means for inputting manipulation to the graphical interactive picture displayed by said display means;

basic action storage means for storing a content of an action for updating the graphical-interactive-picture-structure specification data; and

second graphical interactive picture generation means for retrieving the content of the action from said basic action storage means based on action information directing an update of the graphical interactive picture upon receipt of the input manipulation from said interactive manipulation means to update the graphical-interactive-picture-structure specification data to generate an updated graphical interactive picture.

Please add the following newly drafted Claim 48.

48. (New) A method of synthesizing a menu comprising the steps of:

a menu information receiving step for receiving a plurality of menu information from a plurality of appliances; and

a menu synthesizing step for synthesizing the plurality of menu information received by the menu information receiving step in accordance with a synthesizing rule.